

IN THE SPECIFICATION

Page 1, between the title of the invention and the first line of the text, insert the following:

CROSS-REFERENCE TO RELATED APPLICATION

This Application is a Section 371 National Stage Application of International Application No. PCT/FR2004/001498, filed June 16, 2004 and published as WO 2004/114624 A2 on December 29, 2004, not in English.

FIELD OF THE DISCLOSURE

Please replace the paragraph on page 1, lines 1-5 with the following amended paragraph:

This ~~invention~~disclosure relates to the field of remote control of apparatus, and in particular apparatus with limited data processing resources. Thus, the ~~invention~~disclosure applies, for example, to systems for remote data reading, for example, water, gas or electric meters, and more generally telemetry system and order tracking systems, and more generally, machine to machine (M to M) systems.

Page 1, after line 5, insert the following heading:

BACKGROUND OF THE DISCLOSURE

Page 2, after line 3, insert the following heading:

SUMMARY

Please change the paragraph appearing on page 2, lines 4-5 with the following amended paragraph:

~~—The aim of~~ An aspect of one or more embodiments of the invention is, in particular, to overcome this disadvantage of the prior art.

Please change the paragraphs beginning on page 2, line 11 and

ending on page 3, line 14 with the following amended paragraphs:

Nevertheless, it is an aim of one or more embodiments of the invention to reduce the processing necessary for the apparatus, and to prevent the latter from being equipped with complex and costly means such as a microprocessor.

Another aim of one or more embodiments of the invention is to propose a simple and general technique, enabling a dialogue with a broker to be initiated easily and effectively, according to the MQIsdp protocol.

Thus, a particular ~~objective~~aspect of an embodiment of the invention is to enable such a dialogue to take place simply and inexpensively, using a simple radiocommunication module.

Another aim of one or more embodiments of the invention is to provide such a technique enabling a connection to be established between brokers and apparatus via a radiotelephone channel, in a simple, standardised and inexpensive manner.

~~The~~One or more embodiments of invention also aims to provide such a technique enabling a large number of applications to be developed, without the need to develop specific applications each time.

Another ~~aim~~ aspect of one or more embodiments of the invention is to provide such a technique not requiring knowledge of the MQIsdp protocol in the applications developed.

Yet another ~~aim~~aspect of one or more embodiments of the invention is to provide such a technique which is both technically simple and open-ended, and capable of being adapted to various situations (for example, for the size of the data to be exchanged) and to possible future changes.

These ~~objectives~~aspects, as well as others that will become more clear below, are achieved according to one or more embodiments of the invention with a system for remote control of apparatus enabling an interconnection between at least one broker and at least one remote apparatus according to the MQIsdp protocol.

According to an embodiment of the invention, the control system associates, with at least one of said remote apparatuses, radiocommunication means capable of internally processing a communication protocol implementing API-type source functions available in a software platform (Open AT) enabling at least one application to be embedded, and said radiocommunication means are provided with a set of specific (API) functions enabling data to be exchanged with at least one broker implementing said MQIsdp protocol, so as to enable an interconnection between the broker(s) and the remote apparatus(es) via said radiocommunication means, the latter also managing at least one application between the broker(s) and the remote apparatus(es).

Please replace the paragraph appearing on page 3, lines 15-22 with the following amended paragraph:

Thus, it is possible to entirely internally manage, in the radiocommunication means, and in particular in a module, the application for controlling one or more terminals with a broker functioning according to the MQIsdp protocol, without the terminal knowing this protocol. There is nothing to add to the terminal (no equipment, such as a microprocessor or memory, or software, such as a dedicated application). This is the module that manages these operations, by means of the functions of an embodiment of the invention, and provides the interface with the MQIsdp protocol.

Please replace the paragraph appearing on page 5, lines 23-26 with the following amended paragraph:

Another embodiment of the invention also relates to methods for remote control apparatuses, enabling the interconnection between at least one broker and at least one remote apparatus according to the MQIsdp protocol.

Please replace the paragraphs appearing on page 6, lines 5-13 with the following amended paragraphs:

Another embodiment of the ~~The invention also~~ relates to radiocommunication devices and modules implemented in a system for remote control of apparatuses as described above.

~~Finally, the invention also~~ A further embodiment of invention relates to a set of (API) functions implemented in a system for remote control of apparatuses, enabling data to be exchanged with at least one broker implementing said MQIsdp protocol.

Other features and advantages of one or more embodiments of the invention will become more clear from the following description of a preferred embodiment of the invention, given as a simple illustrative and non-limiting example, and the appended drawings, ~~in which.~~

Page 6, after line 13, insert the following heading:

BRIEF DESCRIPTION OF THE DRAWINGS

Please replace the paragraphs appearing on page 6, lines 14-19 with the following amended paragraphs:

- Figure 1 shows an example of a system in which an embodiment of the invention can be implemented;
- Figure 2 is an example of integrating the MQIsdp protocol in a module according to an embodiment of the invention; and
- Figure 3 is a simplified diagram of an example of sending a message by means of an embodiment of the invention.

Page 6, after line 20, insert the following heading:

DETAILED DESCRIPTION OF THE ILLUSTRATIVE EMBODIMENTS

Please replace the heading on page 7 line 20 with the following amended heading:

2) ~~Principles of the invention~~ Principles of an embodiment of the invention

Please replace the paragraph appearing on page 7, lines 23-30 with the following amended paragraph:

~~The invention therefore~~An embodiment of the invention relates to a new approach for remote control of apparatuses, in particular based on the implementation of a set of specific API functions enabling an external application to manage data exchanges between a remote terminal and a broker, via radiocommunication means (for example, a Wismo module (registered trademark)), without the application knowing the MQIsdp protocol implemented by the broker. These radiocommunication means manage this aspect, and, for example, the acknowledgements provided in the MQIsdp protocol.

Please replace the paragraphs appearing on page 8, lines 5-14 with the following amended paragraphs:

Figure 1 is a simplified illustration of the principle of an embodiment of the invention. The objective is to enable communication between any type of remote machine, for example, measuring instruments 11 and one or more applications hosted by brokers 12, capable of receiving data 13 according to the MQIsdp protocol, and of transforming, processing or transmitting it.

According to an embodiment of the invention, radiocommunication means 14 are associated with the remote terminals (or machines) 11, which radiocommunication means are, for example, in the form of a Wismo module (registered trademark), in particular loading the development tools distributed by the applicant under the trademark "Muse platform".

Please replace the paragraph appearing on page 10, lines 19-

21 with the following amended paragraph:

The general principle of the an embodiment of invention therefore ~~consists of~~includes hosting on the radiocommunication module at least one client software capable of playing the role of a client control software and/or the role of a client monitoring software.

Please replace the paragraph appearing on page 10, lines 25-30 with the following amended paragraph:

Module 14 is therefore capable, according to an embodiment of the invention, of managing API functions, and, in a limited number, enabling a simple and effective dialogue with a terminal, under the control of an internal application. It ensures the transformation to the MQIsdp format, and manages the transmission and reception of data 15 according to this protocol, in a transparent manner for the application and the terminal.

Please replace the paragraph appearing on page 11, lines 18-20 with the following amended paragraph:

According to an embodiment of the invention, a specific command library 26 ("Wavecom SCADA Protocol Library") is provided to communicate according to the MQIsdp protocol, which is placed at the level of the TCP/IP library 24.

Please replace the paragraph appearing on page 29, lines 7-8 with the following amended paragraph:

Figure 3 shows an example of sending a message, using the PI function of an embodiment of the invention.

Please add the following paragraph to page 29 after line 20:

Although the present invention has been described with reference to one or more embodiments, workers skilled in the art will recognize that changes may be made in form and detail without departing from the spirit and scope of the invention.